

Please type a plus sign (+) inside this box → +

PTO/SB/01 (10-00)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>  <input type="checkbox"/> Declaration Submitted With Initial Filing <b>OR</b> <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	<b>Attorney Docket Number</b>	GG109US
	<b>First Named Inventor</b>	Lynette Robyn Griffiths
	<b>COMPLETE IF KNOWN</b>	
	<b>Application Number</b>	09/700,270
	<b>Filing Date</b>	November 13, 2000
	<b>Group Art Unit</b>	
	<b>Examiner Name</b>	

**As a below named inventor, I hereby declare that:**

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

POLYMORPHISM IN A NITRIC OXIDE SYNTHASE GENE

the specification of which (Title of the Invention)

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY)

05/07/199

as United States Application Number or PCT International

Application Number

PCT/GB99/01450

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Country	Priority Not Claimed	Certified Copy Attached?	
					YES	NO
9810085.2	Great Britain	05/11/1998		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

**Burden Hour Statement:** This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



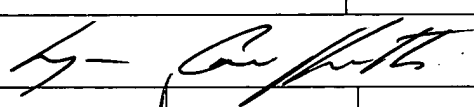
PTO/SB/01 (10-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## DECLARATION — Utility or Design Patent Application

Direct all correspondence to:		<input type="checkbox"/> Customer Number or Bar Code Label		<div style="border: 1px solid black; width: 100px; height: 20px;"></div>		OR		<input checked="" type="checkbox"/> Correspondence address below	
<b>Name</b>		Patricia A. McDaniels							
<b>Address</b>		Gemini Genomics, Inc.							
<b>Address</b>		189 Wells Avenue							
<b>City</b>				<b>State</b>		<b>ZIP</b>			
Newton				MA		02459			
<b>Country</b>			<b>Telephone</b>			<b>Fax</b>			
USA			(617) 527-4198			(617) 527-4199			
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>									
<b>NAME OF SOLE OR FIRST INVENTOR:</b>				<input type="checkbox"/> A petition has been filed for this unsigned inventor					
<b>Given Name</b>				<b>Family Name or Surname</b>					
Lynette Robyn				Griffiths					
<b>Inventor's Signature</b>						<b>Date</b>			
						29.3.01			
<b>Residence: City</b>		<b>State</b>		<b>Country</b>		<b>Citizenship</b>			
Burleigh Heads		Queensland		Australia		Australia			
<b>Mailing Address</b> 14 Ewart Street									
<b>Mailing Address</b>									
<b>City</b>		<b>State</b>		<b>ZIP</b>		<b>Country</b>			
Burleigh Heads		Queensland		4220		Australia			
<b>NAME OF SECOND INVENTOR:</b>				<input type="checkbox"/> A petition has been filed for this unsigned inventor					
<b>Given Name</b>				<b>Family Name or Surname</b>					
<b>Inventor's Signature</b>				<b>Date</b>					
<b>Residence: City</b>				<b>State</b>		<b>Country</b>		<b>Citizenship</b>	
<b>Mailing Address</b>				<b>State</b>		<b>Country</b>		<b>Citizenship</b>	
<b>Mailing Address</b>				<b>State</b>		<b>Country</b>		<b>Citizenship</b>	
<b>City</b>		<b>State</b>		<b>ZIP</b>		<b>Country</b>			

☐ Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

ST/PTO 18 APR 2001

DOCKET NO.: GG109US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Lynette Robyn Griffiths  
SERIAL NO. 09/700,270 GROUP: TBA  
FILING DATE: November 13, 2000 EXAMINER: TBA  
TITLE: POLYMORPHISM IN A NITRIC OXIDE SYNTHASE GENE

Certificate of Mailing  
Pursuant to 37 C.F.R. 1.8

I certify that the this correspondence was deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Box PCT, Assistant Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

Patricia A. McDaniels  
Reg.No. 33,194

Date: 12 April 2001

Sir:

POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

As an authorized representative of the assignee of the above-identified application, Gemini Genomics (UK) Limited, formerly Gemini Research Limited, I hereby appoint:

Patricia A. McDaniels

Reg.No. 33,194

as attorney in this matter. Please direct all future correspondence relating to this application to Attorney McDaniels at the address set forth below.

Gemini Genomics, Inc.  
189 Wells Avenue  
Newton, MA 02459  
(617) 527-4198 (telephone)  
(617) 527-4199 (facsimile)

A Certification Pursuant to 37 C.F.R. 3.73(b) is submitted herewith.

Respectfully submitted,

GEMINI GENOMICS (UK) LIMITED

Paul J. Kelly

President and Chief Executive Officer

DOCKET NO.: GG109US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Lynette Robyn Griffiths  
SERIAL NO. 09/700,270 GROUP: TBA  
FILING DATE: November 13, 2000 EXAMINER: TBA  
TITLE: POLYMORPHISM IN A NITRIC OXIDE SYNTHASE  
GENE

Certificate of Mailing  
Pursuant to 37 C.F.R. 1.8

I certify that the this correspondence was deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Box PCT, Assistant Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

Sir:

*Patricia A. McDaniels*

Patricia A. McDaniels  
Reg.No. 33,194

Date: *12 April 2001*

CERTIFICATION PURSUANT TO 37 C.F.R. 3.73(b)

I certify that Gemini Genomics (UK) Limited is the assignee of the entire right, title, and interest in and to the above-identified application, by virtue of the assignment of the inventor to Gemini Genomics (UK) Limited, a copy of which is submitted herewith. I further certify that I am a party authorized to act on behalf of the assignee, by virtue of the Power of Attorney submitted herewith, and by virtue of the Resolution of the Board of Directors of Gemini Genomics (UK) Limited dated 16 January 2001, a copy of which is submitted herewith.

Respectfully submitted,

GEMINI GENOMICS (UK) LIMITED

*Patricia A. McDaniels*

Patricia A. McDaniels  
Reg. No. 33,194

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN**

Docket Number (Optional)  
GG109US

Applicant, Patentee, or Identifier: Lynette Robyn Griffiths

Application or Patent No.: 09/700,270

Filed or Issued: November 13, 2000

Title: POLYMORPHISM IN A NITRIC OXIDE SYNTHASE GENE

I hereby state that I am

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Gemini Genomics (UK) Limited

ADDRESS OF SMALL BUSINESS CONCERN 162 Science Park, Milton Road, Cambridge CB4 0GH, England

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.  
☒ each such person, concern, or organization is listed below.

Gemini Genomics plc

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Patricia A. McDaniels

TITLE OF PERSON IF OTHER THAN OWNER Head of Intellectual Property Management

ADDRESS OF PERSON SIGNING Gemini Genomics, Inc. 189 Wells Avenue, Newton, MA 02459

SIGNATURE Patricia A. McDaniels DATE 12 April 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN**

Docket Number (Optional)  
GG109US

Applicant, Patentee, or Identifier: Lynette Robyn Griffiths

Application or Patent No.: 09/700,270

Filed or Issued: November 13, 2000

Title: POLYMORPHISM IN A NITRIC OXIDE SYNTHASE GENE

I hereby state that I am

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Gemini Genomics plc

ADDRESS OF SMALL BUSINESS CONCERN 162 Science Park, Milton Road, Cambridge CB4 0GH, England

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.  
☒ each such person, concern, or organization is listed below.

Gemini Genomics (UK) Limited

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Patricia A. McDaniels

TITLE OF PERSON IF OTHER THAN OWNER Head of Intellectual Property Management

ADDRESS OF PERSON SIGNING Gemini Genomics, Inc. 189 Wells Avenue, Newton, MA 02459

SIGNATURE

Patricia A. McDaniels

DATE

12 April 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

REG. CT/PTO 16 APR 2001

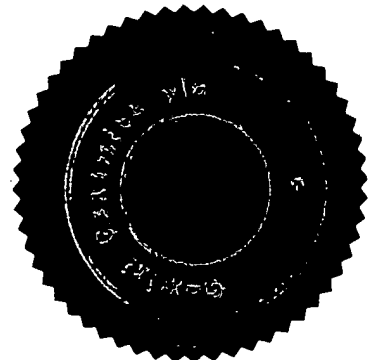
**GEMINI GENOMICS PLC**  
**(formerly GEMINI HOLDINGS PLC)**  
**Registered in England No. 3377251**

**Resolution of the Board of Directors of Gemini Genomics plc at a Meeting  
held at 162 Science Park, Milton Road, Cambridge CB4 0GH England  
On 16<sup>th</sup> January 2001**

That Patricia A. McDaniels, Head of Intellectual Property Management of Gemini Genomics plc, be and hereby is authorised to appear before the United States Patent and Trademark Office and before any foreign patent or trademark office as the duly authorised representative of Gemini Genomics plc and to execute and deliver, in the name and on behalf of Gemini Genomics plc, any and all documents, instruments, applications and filings related to Gemini Genomics plc's patent applications, patents trademark applications, and trademarks, or otherwise relating to the protection of Gemini Genomics plc's intellectual property.

  
.....  
Dr Paul Kelly  
Director

  
.....  
Mr Roger Dickinson  
Secretary



**BEST AVAILABLE COPY**

ST/PTO 13 APR 2001

PTO/SB/15 (08-00)

Approved for use through 05/31/2002. OMB 0651-0027

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## ASSIGNMENT OF APPLICATION

Docket Number (Optional)

GG109US

Whereas, I, Lynette Robyn Griffiths of Queensland, Australia, hereafter referred to as applicant, have invented certain new and useful improvements in POLYMORPHISM IN A NITRIC OXIDE SYNTHASE GENE

☒ for which an application for a United States Patent was filed on May 7, 1999,

Application Number 09/700,270.

☐ for which an application for a United States Patent was executed on \_\_\_\_\_, and

Whereas, Gemini Genomics (UK) Limited of Cambridge, England herein referred to "assignee" whose post office address is 162 Science Park, Milton Road, Cambridge CB4 0GH, England is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of ten dollars (\$1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 29 day of MARCH 2001.

at SOUTHPORT  
AUSTRALIA.

Lynette Robyn Griffiths  
(Signature)

State of QUEENSLAND ) SS:  
County of AUSTRALIA )  
Before me personally appeared said LYNETTE ROBYN GRIFFITHS  
and acknowledged the foregoing instrument to be his free act and deed this 29  
day of MARCH, 2001.

Seal

John Donald McDonald  
(Notary Public)  
JOHN DONALD McDONALD  
NOTARY PUBLIC  
23 NIND ST. SOUTHPORT 42  
QUEENSLAND AUSTRALIA  
MY COMMISSION DOES NOT EXPIRE.

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.



**GEMINI GENOMICS (UK) LIMITED**  
**(formerly GEMINI RESEARCH LIMITED)**  
**Registered in England No. 3100033**

**Resolution of the Board of Directors of Gemini Genomics (UK) Limited at a  
Meeting held at 162 Science Park, Milton Road, Cambridge CB4 0GH  
England on 16<sup>th</sup> January 2001**

That Patricia A. McDaniels, Head of Intellectual Property Management of Gemini Genomics, be and hereby is authorised to appear before the United States Patent and Trademark Office and before any foreign patent or trademark office as the duly authorised representative of Gemini Genomics (UK) Limited and to execute and deliver, in the name and on behalf of Gemini Genomics (UK) Limited, any and all documents, instruments, applications and filings related to Gemini Genomics (UK) Limited's patent applications, patents trademark applications, and trademarks, or otherwise relating to the protection of Gemini Genomics (UK) Limited's intellectual property.



.....  
Dr Paul Kelly  
Director



.....  
Mr Roger Dickinson  
Director